



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/813,808	03/31/2004	Brian Keith Lloyd	A3-068 US	6550
23683	7590	12/16/2004	EXAMINER	
MOLEX INCORPORATED 2222 WELLINGTON COURT LISLE, IL 60532			HARRIS, ANTON B	
			ART UNIT	PAPER NUMBER
			2831	
DATE MAILED: 12/16/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/813,808

Applicant(s)

LLOYD ET AL.

Examiner

Anton B Harris

Art Unit

2831

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 31 March 2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claim 4 is objected to because of the following informalities:

At claim 4 line 1 it recites “cage of claim 4”. The Office interprets the phrase “cage of claim 4” to be “cage of claim 3”.

Any further rejection of, or indications of the allowability of claim 4 are based on claim 4, as it is understood by the Office.

At claim 6 line 2 it recites “conductive material;”. Remove the semicolon so it recites “conductive material.” Appropriate correction is required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-13 are rejected under 35 U.S.C. 102(b) as being anticipated by Haas et al. (5,735,712 cited by Applicant).

Regarding claim 1, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses an electromagnetic interference (EMI) shielding cage comprising:

a bottom member 48;

a conductive cover member 46 electrically coupled to said bottom member 48;

first and second conductive exterior sidewalls 50 electrically coupled to the bottom 48 and cover members 46;

at least one interior wall 50' electrically coupled to said bottom 48 and cover members 46,

the interior wall 50' defining at least two distinct, adjacent internal cavities 20 of said cage 10, each of the internal cavities 20 including a distinct opening (figure 1) communicating with the exterior of said cage 10 and through which an electronic module 12 can pass; and,

an electrically-conductive, compressible gasket (col. 2, line 50), said gasket (col. 2, line 50) encircling said bottom 48, said cover 46 and said first and second side walls 50, said gasket (col. 2, line 50) electrically and mechanically contacting said front panel 74 and at least one of said bottom 48 and cover members 46 and first and second side walls 50, to provide an electromagnetic interference seal between said shielding cage 10 and a device in which said cage 10 is mounted.

Regarding claim 2, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses that said cover member 46 includes at least one “L”-shaped, gasket engagement tab 79, which protrudes above said cover member 46 by a predetermined height H, and which extends toward said conductive gasket (col. 2, line 50).

Regarding claim 3, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses that said bottom 48 is comprised of an “L”-shaped, gasket engagement tab 79, which protrudes below said bottom 48 by a predetermined height and which extends toward said conductive gasket (col. 2, line 50).

Regarding claim 4, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses that said “L”-shaped gasket engagement tab 79 is formed by a portion of said cover member 46.

Art Unit: 2831

Regarding claim 5, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses that said “L”-shaped gasket engagement tab 79 is formed by said bottom 48.

Regarding claim 6, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses that said electrically-conductive, compressible gasket (col. 2, line 50) is a compressible foam that is plated with a conductive material.

Regarding claim 7, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses a rigid gasket backing member 78 interposed between said gasket engagement tab 79 and said conductive gasket (col. 2, line 50).

Regarding claim 8, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses that said engagement tab 79 is formed in said shield 70 proximate to and aligned with said interior wall 50', whereby said interior wall 50' resists bending during assembly of said gasket (col. 2, line 50) to said cage 10.

Regarding claim 9, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses a gasketed shielding cage comprising:

a plurality of conductive wall members 50, 50' that cooperatively define a hollow receptacle 20 and the wall members 50, 50' further defining an opening (figure 1) with a defined perimeter at an end of said cage 10 into which said module 14 may be inserted;

a rigid backing member disposed on said cage 10 proximate said cage opening (figure 1) thereof, the backing member extending completely around said cage opening (figure 1), said cage wall members 50, 50' including a plurality of support tabs 79 that engage said backing member and support it in its extent around said cage opening (figure 1); and,

Art Unit: 2831

a conductive gasket (col. 2, line 50) disposed adjacent said backing member and also extending completely around said cage opening (figure 1), the gasket (col. 2, line 50) being compressible such that it may be pushed into contact with an inner surface of a panel of a device in which said shielding cage 10 is disposed.

Regarding claim ^(b)~~8~~, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses that said rigid backing member 78 is conductive. PR 12/13/04

Regarding claim 11, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses said support tabs 79 include a plurality of L-shaped arms 79 that first extend outwardly from said wall members 50, 50' and secondly parallel to said wall members 50, 50' to define L-shaped contact arms 79 having an intervening space between said the contact arms 79 and said wall members 50, 50', portions of said backing member and said gasket (col. 2, line 50) being received within the intervening spaces.

Regarding claim 12, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses that said backing member 78 and said gasket (col. 2, line 50) include a plurality of reduced heights portions that are aligned with said contact arms 79 such that said reduced height portions fit into said intervening spaces (figure 9).

Regarding claim 13, Haas et al. (col. 3, line 51 – col. 4, line 67) discloses that said cage 10 includes a plurality of interior walls 50, 50' defining sub-openings (figure 9) of said cage 10 and said contact arms 79 are aligned with said interior walls 50, 50'.

Conclusion

Art Unit: 2831

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Pommerenke et al. U.S. Patent No. 6,274,807 B1 discloses a gasketed EMI enclosure including a cover, side walls, and internal cavities.

Dickey et al. U.S. Patent No. 6,320,122 B1 discloses a gasketed EMI enclosure including a cover, side walls, and internal cavities.


Glover U.S. Patent No. 6,242,690 B1 discloses a gasketed EMI enclosure including a cover, side walls, and internal cavities.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Anton B Harris whose telephone number is (571) 272-1976. The examiner can normally be reached on weekdays from 8:30am to 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Dean Reichard, can be reached on (571) 272-2800 ext 31. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

abh

12/13/04


DEAN A. REICHARD
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800